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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, VAN KIM T

ART UNIT PAPER NUMBER

2151

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,357

Applicant(s)

BANERJEE ET AL.

Examiner

Van Kim T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to communications filed on October 3, 2005.

Claims 1-20 are pending in the case.

Response to Arguments

2. Applicant's arguments filed October 3, 2005 regarding the drawings have been fully considered:

The objection of Figure 5 regarding unlabeled boxes has been withdrawn. However, the drawings are objected to because the amended Figure 5 comprising handwritten labels which will give them satisfactory reproduction characteristics. Every line, number, and letter must be durable, clean, black (except for color drawings), sufficiently dense and dark, and uniformly thick and well-defined. The weight of all lines and letters must be heavy enough to permit adequate reproduction. This requirement applies to all lines however fine, to shading, and to lines representing cut surfaces in sectional views. Lines and strokes of different thicknesses may be used in the same drawing where different thicknesses have a different meaning. See 37 CFR 1.84(l).

Arguments regarding the objection of Fig. 1-4 are not persuasive. Applicant is required to either amend the drawings to illustrate inventive subject matters or designate the drawings by a legend such as --Prior Art-- because only that which is old is illustrated. . See MPEP § 608.02(g).

The objection of Figure 4 because of Ref. 432 has been withdrawn.

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Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Applicant's arguments filed October 3, 2005 regarding the rejection of claims 1-20 have been fully considered but they are not persuasive. Reasons are provided below.

In response to applicant's argument that “*Potter does not teach, show or so much as suggest the steps of determining whether data being processed is network data; and of transacting, if the data is network data, the data using a virtual Internet protocol (IP) address, the virtual IP address being an address of a data holding device*”, page 14: lines 15-20; a recitation of the intended use of the claimed invention must result in a structural difference

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between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, Potter discloses router 200 which processes data and determines whether the data is network data, and if the data is network data (e.g., data transmitting between two end stations), transacting the data using a IP address of a holding device (col. 4: lines 38-56; and col. 5: lines 49-65). Thus it meets the claims.

Fesas was not relied upon for the rejection of claimed limitation “*determining whether data being processed is network data; and of transacting, if the data is network data, the data using a virtual Internet protocol (IP) address, the virtual IP address being an address of a data holding device*”, thus arguments against Fesas prior art are moot.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-2, 6-7, 11-12, and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Potter (US 6,505,269).

Regarding claims 1, 6, 11, and 16, as shown in Figures 1-9, Potter discloses a method of transacting network data, comprising:

determining whether data being processed data is network data (i.e., data are processed and transferred between end stations 102, 112 which may include personal computers or workstations, and intermediate station 200 which may be a router or a network switch, based on

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a predefined protocol such as IP, Internet Packet Exchange, AppleTalk or DECNet protocol, thus the data is network data; col. 4: lines 38-56); and

transacting, if the data is network data, the data using a virtual IP address (e.g., if the data is network data, route data using an IP address, e.g., destination IP address; col. 4: line 57 – col. 5: line 65), the virtual address being an IP address given to a data holding device in the multiprocessor system (e.g., engine 300 uses an IP address of the header to determine where to send the packet by indexing into the FIB. Executing the forwarding operations results in destination MAC address of the headers being rewritten by the processing engine to identify output ports for the packets (col. 5: lines 49-65).

Regarding claims 2, 7, 12, and 17, Potter also discloses the data holding device is a buffer (210).

Claim Rejections - 35 USC § 103

6. Claims 3-5, 8-10, 13-15, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potter, in view of Fesas, Jr. (US 6,397,316), hereinafter Fesas.

Regarding claims 3, 8, 13, and 18, the combination of Potter and Fesas also discloses the buffer (210, 220, 230, 400) is implemented using memory allocation (Potter: col. 5: lines 16-19; col. 5: lines 30-36; and col. 8: line 60 – col. 9: line 8).

Since Potter and Fesas teach analogous arts, relating to transferring network data using improved virtual-to-physical address translation techniques, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Fesas' addressing scheme

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in Potter's system, motivated by the need to reduce performance bottleneck and thus, improve data transmission quality and rate.

Regarding claims 4, 9, 14, and 19, the combination of Potter and Fesas also discloses the buffer contends for access to one of the limited physical interfaces (e.g., the memory arrays operate independently to avoid contention among the controllers; Potter: col. 7: lines 34-45).

Since Potter and Fesas teach analogous arts, relating to transferring network data using improved virtual-to-physical address translation techniques, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Fesas' addressing scheme in Potter's system, motivated by the need to reduce performance bottleneck and thus, improve data transmission quality and rate.

Regarding claims 5, 10, 15, and 20, the combination of Potter and Fesas also discloses before transmitting the data to the physical interface, the virtual IP address replaced by a destination IP address (e.g., forwarding information based on destination IP address; Potter: col. 5: lines 49-65).

Since Potter and Fesas teach analogous arts, relating to transferring network data using improved virtual-to-physical address translation techniques, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Fesas' addressing scheme in Potter's system, motivated by the need to reduce performance bottleneck and thus, improve data transmission quality and rate.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Van Kim T. Nguyen whose telephone number is 571-272-3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung, can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Van Kim T. Nguyen
Examiner
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vkn


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER